

suggest where it may be found. The following inquiry, however, caused more than the usual scratching of heads and chewing of pencils.

Dear Sirs: I have been advised by the State Game and Fish Department that you can furnish me the following information:

What areas generally speaking do they inhabit? How far north and south do they range? What type of terrain do they prefer for nightly roosting place, and how far will they fly nightly to roost there? What season of the year do they mate and do they mate for life? . . . I shall very much appreciate any courtesy you extend in furnishing the desired information.

After earnest consideration of this communication, we have concluded that the answers to these questions can best be supplied by the Division of Fish and Game.



STUDENT MEETING ON SEPTEMBER 16

THE STUDENT MEETING for September will be postponed until September 16 by reason of Labor Day and Admission Day involving the first two week-ends of the month. On Saturday afternoon, September 16, at 2:00 o'clock, in Room 214, Simson African Hall, Mr. Brooking P. Tatum will address the Student Section on the subject, "Wildflowers of California." Mr. Tatum's lecture will be illustrated by numerous Kodachrome lantern slides of California wildflowers.

Everyone interested is invited to attend.

SECTION 562 P.L. & R.

ACADEMY NEWS LETTER

Number 57

September, 1944



SAN JOAQUIN VALLEY ELK GROUP
IN NORTH AMERICAN HALL

Published Monthly by
CALIFORNIA ACADEMY OF SCIENCES
GOLDEN GATE PARK • SAN FRANCISCO

CALIFORNIA ACADEMY OF SCIENCES

GOLDEN GATE PARK • SAN FRANCISCO



September Announcement

THE REGULAR SEPTEMBER MEETING of the California Academy of Sciences will be held in the Assembly Room (third floor) of the San Francisco Public Library on Wednesday evening, September 6, 1944, at seven-thirty o'clock. The speaker of the evening will be Dr. F. M. MacFarland, President of the California Academy of Sciences, who will take as his subject:

STRUCTURE AND DEVELOPMENT OF THE MOUTH-PARTS OF THE OPISTHOBRANCH MOLLUSCA

The Opisthobranch Mollusca constitute an inadequately known but vastly interesting group of organisms. Included among them are the Pteropods, swimming or drifting mollusks which occur at times in countless millions in the sea, their fragile shells sinking at length to the bottom and forming in certain restricted areas the principle deposit on the ocean floor. Closely related are the sea-hares, larger forms found often in the intertidal zone, which give off great quantities of purple coloring-matter when disturbed. Another group is represented by the Nudibranchs or naked-gilled mollusks, which anyone of sufficient patience may find for himself among marine vegetation. They are characteristically fringed, translucent, multi-colored creatures of breath-taking beauty.

Dr. MacFarland, during more than forty years of service as a member of the biological faculty of Stanford University, has made the Opisthobranchs one of his major subjects of investigation. He is known throughout the world as an authority on this group.

The public is cordially invited to hear Dr. MacFarland.



APPLICATIONS FOR MEMBERSHIP

NOTICE is hereby given to all Corporate Members that the Council at its meeting on August 24, 1944, approved the applications of Mr. Carl H. Beal, Mr. William H. Hodgkins and Dr. Donald B. Tressider for MEMBERSHIP,

and of Mr. John Berry and Mr. Daniel H. Miller for STUDENT MEMBERSHIP in the California Academy of Sciences. If no objection to the election of these applicants be received at the office of the Academy within two weeks after September 1, they will be considered elected.



THE SAN JOAQUIN VALLEY ELK

THE SAN JOAQUIN VALLEY ELK (*Cervus nannodes*), known also as the Dwarf Elk and Tule Elk, is restricted to California. It formerly ranged throughout the San Joaquin and Sacramento valleys, also westward through the Cuyama Valley into Santa Barbara County and through Santa Clara County to Monterey.

As a result of persistent persecution the great herds became reduced almost to the point of extermination. A small band, the last of the race, took refuge on the ranch of Miller and Lux in Kern County. Here at the present time, near the town of Buttonwillow, the last remnants of this herd to be found within their former range are confined in an enclosed refuge. Several small bands have at various times been introduced to other portions of the state. At present there are a small number of these elk in Colusa County, in Monterey County and in Owens Valley.

At certain seasons these elk resorted to the great tule swamps; hence the name "Tule Elk," used to distinguish this species from the larger Roosevelt Elk which inhabits the humid coast belt north of San Francisco. The Tule Elk, in addition to being smaller than any other North American species of elk, is also decidedly paler.

The animals in the group depicted on page 1, which is to be seen in the Academy's Hall of North American Mammals, came from near Buttonwillow, Kern County, California, from the Miller and Lux ranch, to the owners of which the Academy is indebted for many courtesies in connection with the securing of the specimens.

This group was prepared under the direction of John Rowley. The background was painted by Charles Abel Corwin.



HABITS OF THE DIVISION OF FISH AND GAME

THE ACADEMY is continually in receipt of inquiries on all sorts of subjects, and usually someone on the staff is able either to supply the answer or to